player, a Realnetworks streaming audio file player, etc.), a viewer (e.g., an Abobe Acrobat pdf reader), etc.

[0048] A "content owner" is a person or entity that has some property right in the content of a document. A content owner may be an author of the content. In addition, or alternatively, a content owner may have rights to reproduce the content, rights to prepare derivative works of the content, rights to display or perform the content publicly, and/or other proscribed rights in the content. Although a content server might be a content owner in the content of the documents it serves, this is not necessary.

[0049] "User information" may include user behavior information and/or user profile information.

[0050] "E-mail information" may include any information included in an e-mail (also referred to as "internal e-mail information"), information derivable from information included in the e-mail and/or information related to the e-mail, as well as extensions of such information (e.g., information derived from related information). An example of information derived from e-mail information is information extracted or otherwise derived from search results returned in response to a search query composed of terms extracted from an e-mail subject line. Examples of information related to e-mail information include e-mail information about one or more other e-mails sent by the same sender of a given e-mail, or user information about an e-mail recipient. Information derived from or related to e-mail information may be referred to as "external e-mail information."

§ 4.1.4 Exemplary Search Engine

[0051] The present invention may use associations of query information and selected document information to determine terms/phrases. The determined terms/phrases may be used as targeting keywords for example. As another example, the content of an ad creative may use the determined terms/phrases. If such query information to selected document information associations are not provided, they may be determined. For example, they may be determined using a search engine.

[0052] FIG. 3 illustrates an exemplary search engine with which at least some aspects of the present invention may be used. Search operations 310 accept query 320 and determine search results using, for example, a term-to-document inverted index 330 and possibly search ranking information. (See, e.g., U.S. Pat. No. 6,285,999.) The search results may be provided in a search results document 350, such as a Web page for example. The search results document may include a list of one or more search results 360. Note that if the search engine is also an ad consumer (which is not necessary to practice some aspects of the present invention), the search results document 350 may include one or more ads 370. A search result may include information indicative of the document determined to be relevant to the query 320, as well as a link (e.g., a hyper-text link) to that document. Information indicative of the document may include a document title, excerpts from the document (e.g., text excerpts or snippets of text proximal to terms used in the query 320), a location of the document, etc.

[0053] A user may select one of the search results 360, often by "clicking" the result. In this example, a user has selected result 2 as indicated by click 380. Such a selection brings the document 390 corresponding to search result 2 to the user (e.g., to a browser). The document 390 may be a Web page for example. Web pages may have a globally unique identifier, such as a universal resource locator (URL) for example. The Web page may be a home page (e.g., a root in a hierarchical Website or domain), or it may be a page of a Website other than a home page. Aspects of the present invention that may be used with such search operations are described with reference to FIG. 4 in § 4.2.1 below.

[0054] Various exemplary embodiments of the present invention are now described in § 4.2.

§ 4.2 Exemplary Embodiments

[0055] The present invention may be used to associate query terms with selected documents. This aspect of the present invention is described in § 4.2.1 below. The present invention may use such query term to selected document associations to populate ad information, such as targeting keywords, creative content, etc. This aspect of the present invention is described in § 4.2.2 below.

§ 4.2.1 Associating Query Terms with Selected Documents

[0056] FIG. 4 is a bubble chart illustrating operations that may be used with search operations, such as those described above with reference to FIG. 3, to associate query terms with selected documents. Elements already described above with reference to FIG. 3 are not described again.

[0057] Operations 410 to associate information from the query 320 with the selected document/domain (hereafter referred to simply as "document/domain") 390 may be used to associate and store a document (and/or a domain) information (e.g., a document/domain identifier) and query information 430. If the selected document is a Web page, the document identifier may be its URL, and the domain identifier may be the home page of the Website to which the Web page belongs. The query information may simply be the query itself. Alternatively, the query information may be terms parsed from the query. Certain "stop" terms that often occur in search queries but which carry little or no meaning (e.g., "the,""a,""and,""or,""what,""where," etc.) may be filtered out of the query information. Information about existing advertiser documents/domains (e.g., a landing page specified by an ad of an advertiser, a home page of a Website of an advertiser, etc.) 420 may be used to filter out documents/domains selected that do not correspond to any existing advertiser. Such filtering, however, is not necessary.

[0058] Further operations 440 may be used to aggregate the document/domain information to query information associations 430, and store such aggregated information as query term/phrase to selected document/domain association information 450.

[0059] FIG. 5 is a flow diagram of an exemplary method 500 that may be used to associate query terms/phrases with selected documents/domains and to aggregate such associations. As indicated by block 510, various branches of the method 500 may be performed in response to various events. For example, if a search result is selected, information (e.g., an identifier) of a document/domain associated with the search result is associated with query information, such as